

The Kautilyan State's Motives for Economic Intervention

Sriharsha Kethireddipalli

TC 660H
Plan II Honors Program
The University of Texas at Austin

May 7th, 2019

Dr. Donald Davis
Department of Asian Studies
Supervising Professor

Dr. Sumit Guha
Department of History
Second Reader

Abstract

Author: Sriharsha Kethireddipalli

Title: The Kautilyan State's Motives for Economic Intervention

Supervising Professors: Dr. Donald Davis, Dr. Sumit Guha

The Arthaśāstra is a masterpiece text compiled by Kautilya. It provides in-depth instructions for a king on how to effectively rule a kingdom and stay in power. The text discusses a wide array of topics, including economics, law, foreign policy, and ethics. Since its rediscovery in 1905, researchers have been fascinated by the economic policies outlined in the Arthaśāstra. While many have provided descriptions of these policies, why are these specific policies prescribed by Kautilya? To answer this question, I first describe some of the important regulatory actions that the Kautilyan state were recommended it take to set up and maintain a strong economy. Then, I outline the various ways that the government actively engages with the economy through its own ventures, sometimes replacing and sometimes competing with the private sector. I then make an argument for classifying Kautilya as a political realist, and describe how the underlying principles of realism (structural and classical) and insecurity drive much of the economic policy in the Arthaśāstra.

Acknowledgments

First and foremost, I would like to thank my parents for being my role models and best friends. You both have helped me realize that I owe it to myself to pursue my interests and always be unapologetically myself. Throughout my undergraduate experience, you have always been available to talk and welcomed me home with open arms when I needed a break from Austin. Making you proud has always been and will always be my most important goal. If I have done that, then I know that I have done something right.

I would like to thank Dr. Donald Davis for agreeing to be my thesis supervisor for Plan II. Dr. Davis, nothing I can say or do can express how grateful I am for your guidance. You introduced me to the world of academia and were always willing to answer my questions. Most importantly, you empowered me to explore topics that I was genuinely passionate about and never hesitated to point me in the right direction. Being your student in Advanced Sanskrit was truly an honor, and I know that my journey studying Sanskrit and South Asian culture is far from over.

Dr. Guha, I would also like to thank you for meeting with me and communicating with me all year despite taking time off to work on projects. Your expertise in history and economics shaped my thesis from the first day that we met. Thank you very much for being patient with me throughout this process and for working alongside Dr. Davis to help me complete this thesis.

Table of Contents

Abstract	1
Acknowledgments	2
CHAPTER 1: INTRODUCTION	5
The Arthaśāstra	6
Academic Study of the Arthaśāstra	7
Key Concepts and Clarifications	9
CHAPTER 2: GOVERNMENTAL REGULATION	12
Standardization of Processes	12
Standardization of Measures	12
Standardization of Lending	14
Standardization of Accounting and Recordkeeping	16
Taxation	18
The Treasury and the Storehouse	19
Times of Emergency	22
Trade Regulation	23
Internal Trade - The Marketplace	23
Foreign Trade	26
Monitoring and Fines	29
CHAPTER 3: DIRECT PARTICIPATION BY THE GOVERNMENT	31
Infrastructure Investment	31
Agriculture	33
Monopolies	36
Forests	37
Mines	40
Competing with the Private Sector	43
CHAPTER 4: THE STATE'S PRIMARY MOTIVATIONS	46
Note on Realism and the Insecurity of the King	46
Desire for Growth	48
Growth of Wealth	48
Growth of Power	50
Desire for the Well-Being and Docility of the Citizens	51
Fear of Disaster	55
CHAPTER 5: AREAS FOR FURTHER STUDY AND CONCLUSION	58

	4
Areas for Further Study	58
Conclusion	60
References	62
Biography	66

CHAPTER 1: INTRODUCTION

Kautilya's Arthaśāstra is an ancient Sanskrit text, composed between 100 BCE and 100 CE, that outlines the steps that a king should take to set up, maintain, and expand his kingdom. It adds to a rich tradition of sociopolitical and economic thought in ancient India, which dates back at least as far as the Atharvaveda, written in 1000 BC (Waldauer p. 101). The Arthaśāstra contains a wealth of knowledge and touches on many disciplines, ranging from civil law to foreign policy. However, this thesis will focus strictly on the topic of economics. In this thesis, I seek to explain the primary motivations behind the state's role in the economy. To accomplish this task, I will first explain the structure of the Arthaśāstra and the makeup of the Kautilyan government. I will then outline the state's role in developing the rules and regulations that provide structure of the economy. This section will include a thorough discussion of the marketplace, fair business practices, fiscal policy, and other features of the economy as mandated by the Arthaśāstra. Third, I will examine the ways in which the king directly participates in the economy. Most of these examples pertain to the government-operated enterprise, such as royal monopolies. Finally, I will enumerate the underlying motivations to explain why the state plays such an active role in the economy. In this final section, I will explain how the Kautilyan state is motivated by the principles of political realism and discuss how the underlying motivations tie into these principles.

The Arthaśāstra

To conduct my primary research, I relied on Patrick Olivelle's *King, Governance, and Law in Ancient India*, the most updated and accepted translation for the Arthaśāstra at the time of composition of this thesis project. Many other researchers and academics who focus on the Arthaśāstra have used translations written by R. P. Kangle, but I employ Olivelle's because it is the most up to date and incorporates Sanskrit research that was unknown to Kangle and earlier translators. To supplement this translation, I have used the Sanskrit manuscript in Kangle's edition to notice patterns and trends in the usage of certain words (guided by Dr. Olivelle's translation).

The Arthaśāstra is a text about politics, economics, law, and war. It provides marvelous insights into the king's role in building and maintaining a state. The word "Arthaśāstra" in Sanskrit literally translates to the science (śāstra) of wealth (artha). This should provide a clear idea of the primary focus of the composition. The Arthaśāstra is organized into fifteen books, each containing several chapters. Book 1 contains information about the importance of training for a king. It includes a high-level overview of the contents of the remainder of the text and asserts the importance of taking its teachings seriously. Book 2 is about the bureaucracy as it relates to the economy. Much of my work in this paper directly pertains to this subject matter. This section of the Arthaśāstra is one of the most methodical and detailed, and it contains a plethora of information that has guided my research. Book 3 is about "Justices," or the legal system. It describes the various social and legal parameters that define life in the Kautilyan state. Book 4 is essentially about ameliorating and preventing issues that arise throughout the various

facets of the kingdom. Think of this section as a crisis management guide for the king. Book 5 covers the topic of secret conduct, both sanctioned and unsanctioned. It describes the ways the king can disincentivize devious behavior by public and private agents alike, but this part of the text also tells the king how he himself can conduct secret activities for his own personal gain and the gain of the kingdom. Book 6 marks a pivot point in the book. From this point, Kautilya focuses on foreign policy and the conduct of a king with regards to external agents. Books 7 through 13 are about strategy and warfare. Kautilya makes it a point to deeply explain the actions a king can take given various scenarios. For example, he tackles issues like waging war as the clearly weaker king. He describes the deployment of spies to understand the foreign entity's capabilities. He also describes the mechanics of warfare, down to the science of capturing a fort. In Book 14, Kautilya discusses oddities and rare events in warfare and foreign affairs, while attempting to enumerate ways a king can handle these issues. Finally, in Book 15, he concludes by reiterating the importance of the Arthaśāstra in enabling a king to execute his duty most effectively.

Academic Study of the Arthaśāstra

After thousands of years, the Arthaśāstra resurfaced in 1905. It was discovered by Rudrapatna Shamasastri, a Sanskrit scholar and librarian at the Oriental Research Institute in Mysore, India. Since then, there has been immense interest in the practical and academic value of the text. There have been many additions to the body of research and translations conducted on the Arthaśāstra. However, research on Sanskrit continues to evolve and grow. Researchers such as Mark McClish and Thomas Trautmann have conducted and continue to carry out thorough

analyses about the authorship and specific dating of the Arthaśāstra. Using historical research about trade, linguistic patterns, and the style of composition, they have derived strong theories about the authorship, dating, and geography of the text.

Much of the current literature suggests that the Arthaśāstra was composed and revised by several scholars over several centuries. According to Mark McClish and Patrick Olivelle, the author of the Arthaśāstra, Kautilya, is often considered to be one and the same as Canakya, a minister in the Chandragupta empire. They believe that this association is based on long-standing historical memory, but since there is no concrete evidence of this, we should look to in-depth analyses of the text to learn more about its authorship. Upon closer examination, we can see that Kautilya was a compiler, who brought together several works to create the structure of the present text. McClish argues that a “redactor” edited and modified the Arthaśāstra to include the chapters, topics, and the verse at the end of each chapter. This allowed the text to be taught as a reference book over many generations.

Moreover, the date of the Arthaśāstra’s composition is up for debate. McClish writes that the use of silver and copper coins (but not gold coins) in the text places the upper limit of its authorship in the first century CE. This is because the first gold coins were minted around this time period. The lower limit of the Arthaśāstra’s authorship has been determined to be around the first or second century BCE. This is because of the inclusion of words such as “coral” in the Arthaśāstra. Coral, which is not natively found in the Indian Ocean, was imported from the Mediterranean as a luxury good around this time period. According to McClish and Olivelle, these analyses conform well to the linguistic analysis on the Sanskrit of the Arthaśāstra as well (McClish pp. xiv-xxi).

Key Concepts and Clarifications

The following concepts are critical to my analysis in this thesis, so I would like to offer the following definitions and explanations to supplement.

- **Kautilya**: While current literature strongly suggests that the treatise was written in several stages by many contributors (as previously mentioned), I will use the name “Kautilya” to collectively refer to the authors for the sake of simplicity. Also, since some authors that have written on the subject of the Arthaśāstra published their works before the groundbreaking conducted by McClish and Olivelle, they refer to Kautilya as Caṇakya/Chaṇakya. While I use Kautilya when referring to the author(s) of the text, some of the sources I cite refer to him as Caṇakya/Chaṇakya.
- **Economy**: I will follow the Cambridge dictionary definition of the economy, which is “the system of trade and industry by which the wealth of a country or region is made and used.” This is an apt definition for the purposes of this thesis because it includes both the institutions of the economy and the commercial activity. The government’s interventions in the economy may be a bureaucratic arm in addition to direct commercial investments. This definition also encompasses the trade encompassing agriculture and mining rather than solely skilled trades.
- **King**: The king and the state, for the purposes of this essay, are the same. The writers of the Arthaśāstra intended for their work to be studied by kings. The assumption of the text is that everything within the kingdom can be controlled and regulated by the king, and that which is not is explicitly mentioned as such. There are many sections within the

work about trust, appointing the right people, and weeding out cheats and cons from the administration. The general approach of the book is to inform the king of his duties and the best practices to ensure the welfare of both himself and the kingdom as a whole. The success of the king results in the success of the kingdom. Hence, I will be using the terms king and state interchangeably, because the king is the ultimate decision maker according to the text.

- **Traders:** Traders are all skilled laborers as well as those who move products and services from one location to another, not only those who are proficient in the art of “trading.”
- **Market:** “Market” is the abstract word I use to describe the general activities of places of commerce and trade. In some locations within the kingdom, the market is consolidated, but in others, they are dispersed. To bundle them in one term I use the word market for simplicity.
- **Public vs. Private:** I also use the terms public and private throughout the thesis to label actors as either government-affiliated or not. I understand that the “public” distinction in modern rhetoric comes from the idea that the government’s power comes from the people. In the Arthaśāstra, the power of the king does not directly come from the people but rather from the institution of the monarchy. The use of the words “public” and “private” are used only for the sake of simplicity.

I would also like to clarify that my analysis depends on the use of numerous secondary sources regarding history, economics, and sociology. The facts, figures, and analysis from these works are generally directly relevant to modern economics and statecraft. I do not intend on

making the claims that the *exact same* dynamics are at work in the Arthaśāstra; rather, I draw parallels to these other trends and phenomena to merely illustrate the underlying forces at work in this text. It is my hope that my use of these sources has the intended effect and does not distort my arguments.

CHAPTER 2: GOVERNMENTAL REGULATION

Standardization of Processes

Standardization of Measures

One of the most important features of the Kautilyan economy is the heavy emphasis on standardization. One way to think about the importance of standardization is to evaluate a modern economy's accounting standards. In the United States, Generally Accepted Accounting Principles (GAAP) accounting standards are mandatory for publicly traded companies' financial statements (Kokemuller par. 1). This allows for useful data collection by investors and enables companies and authorities to compare their data with industry standards. If there were no accounting standards, then overall transparency in the economy would be low, as companies opt to depict their financials in the most positive possible way. This could be dangerous due to the possibilities of fraud.

For similar reasons, the Superintendent of Standardization has a very important role within the Kautilyan economy. He should “have factories constructed for the manufacture of standard weights and measures” (2.19.1). In a society lacking modern technology, these basic standards for weights and measures allows consumers and authorities to understand and compare prices and quantities amongst competitors in the market. The Arthaśāstra enumerates the various terms relating to weights and measures and offers explanations that allow anyone to understand. For example, the text states that “Ten Māṣa-beans—or five Guṇja-berries—make one gold Māsaka” (2.19.2). Relating the weight of a gold weight (also used as currency or a medium of

trade) to ten Māṣa beans and five Guñja berries provides important context to the reader. Based on these descriptions, the reader can conceptualize each weight relative to some common, standard items found in nature. While this seems relatively straightforward, the significance of these centrally-managed weight standards cannot be overstated. The Kautilyan society lacks units such as grams and pounds to measure the weight of items. It also lacks modern measuring technology. However, universalizing standards as mentioned above provides baseline points of comparison that would enable transactions to occur with significantly less hassle and far more transparency. The text provides many terms regarding weights and measures that this thesis will not explore, but it is worth noting that these measures provide a backbone to the economy.

Understanding this, Kautilya instructs the king on how to minimize fraud in the economy. After all, shaving mass off of the weights would allow merchants to sell less product for a higher price. The gold and silver merchants (and other workshop owners) in the market ought to “buy balances and weights directly from the Superintendent of Standardization; otherwise, they are fined 12 Paṇas” (2.14.15-16). Using the estimates for each weight as described above would not suffice. The general idea is to eliminate the possibility of these workshop owners from practicing fraudulent or dishonest business. Fines are one important way that merchants are incentivized to practice honest business. I will discuss the nature of fines in a later section.

Public officials “should have the stamping of weights and measures carried out every four months” (2.19.40). Not only does the king want all traders to use these standardized weights, he also ought to regularly verify that the weights that are used are accurate. If the Superintendent notices alteration, the offender would be punished with a proportional punishment intended to recoup the economic loss to the economy and disincentivize such

behavior in the future. Standard weights and measures are extremely important to the internal trade of a particular economy. According to Martin Daunton, who analyzed the historical economic progression of Britain, “variations in weights and measures were [...] internal barriers to free trade by creating uncertainty and imperfect competition, and the[...]process of standardization provides one measure of the emergence of an integrated national market” (Daunton p. 278). This provides valuable insight into Kautilya’s underlying reasoning for instituting stringent requirements for weights and measures. On a broad level, these measures eliminate the detrimental barriers to free trade.

Standardization of weights and measures form the basis of price formation. Imagine traders from two villages attempting to trade grain. The only way they could agree upon a price is to understand what standards of measurements are being used. Imagine a gallon of oil meaning something different in two different cities. How could a transaction ever occur? To fix this issue, Kautilya fixing standard weights and measures so that this logistical issue is taken care of, and people can simply trade using these standards to drive the prices.

Standardization of Lending

One of the remarkable features of the Arthaśāstra is its discourse regarding lending and debt. Kautilya clearly had a strong grasp on the importance of financing—in particular—leverage, on the long-term growth of an economy. At the most basic level, debt in an economy enables those who lack capital to receive it—at a cost. In exchange for lending his capital, the lender regains his initial loan as well as interest as a fee for temporarily giving someone money.

On the topic of interest rates: “One and a quarter Paṇas per month on 100 Paṇas is the righteous rate of interest; five Paṇas. The commercial rate; ten Paṇas for travelers through wild tracts; and 20 Paṇas for seafarers” (2.11.1). This is fascinating for a couple of reasons. First, the interest rates are already set. Due to a lack of transparency in the debt markets (enterprises cannot issue bonds, and people cannot simply request loans from their local bank), these rates are prescribed to avoid usury. Second, the rates of interest increase as the riskiness of the loan increases. This understanding of differing interest rates (as they relate to riskiness) is an important idea. If the cost of borrowing capital to take a boat to a foreign, unknown land to sell textiles was the same as the cost of borrowing capital to buy seeds for a local farm, then people would feel more comfortable with taking wild risks with the hope that their gamble pays huge dividends. Making the cost of borrowing for risky ventures ensures that there is a healthy mix of risk throughout the economy while providing access to leverage to those who need it. Kautilya makes the distinction between personal loans and commercial loans because of these differences in risk.

Debt is important for reasons other than access to capital. Debt may incentivize people to work harder. M.L. Darling, in his book *The Punjab Peasant in Prosperity and Debt*, conducted a statistical analysis that found that agriculturists and farmers had higher output when they were receiving loans to finance their operations (Darling p. 235). I suspect that Kautilya understands this dynamic, in particular due to the lengthy discussion of the importance of commercial loans—especially to farmers. When farmers owe money or grain to a lender, they are incentivized to produce more crop in a given year. This increases the amount of this particular crop in the economy and is on net beneficial from a macro level. The upper limits on interest

rates prevent this practice from turning into extortion. Having access to debt is a common way to spur growth in private enterprise. Sometimes in order to expand operations and be more efficient, business-owners might need debt to make the right investments. From an interpersonal perspective, the access to loans helps people enjoy a greater quality of life.

Standardization of Accounting and Recordkeeping

One of the remarkable inclusions of the Arthaśāstra is the heavy emphasis on standardization of accounting and recordkeeping. Kautilya clearly believes that the regulation and upkeep of these processes is critical to the health of the state. His instructions are clear regarding the scope and detail. For example, he states that “the accounting period is recorded according to the regnal year, month, fortnight, and day” (2.6.12). Using uniform time periods for accounting enables the officials to demand the accounting data at a uniform and predetermined day. More importantly, it enables the king and his advisors to compare the data across various periods. None of this data is important in a vacuum. However, with standard accounting periods, the king receives a much clearer idea of the degree of economic progress or stagnation that his kingdom experienced. The data that is important to Kautilya includes “estimated revenue, established revenue, outstanding revenue, income and expenditure, and balance” (2.6.13). This is a simplified list of line items on current financial statements. Kautilya clearly has a strong understanding of the primary inflows and outflows of a business enterprise. These line items would serve several purposes. First, they illustrate the profitability and history of enterprises. By analyzing this data, the king can understand the economic strengths of his own kingdom. This enables a more efficient allocation of resources. Moreover, this assists in taxation of businesses,

which oftentimes scales with the degree of net income. I will discuss more about the processes of taxation in an upcoming section.

In addition to business accounting, officials must also keep records of government activity. All official records take the form of registry books that are submitted to the Bureau of Official Records. In these registry books, officials from the public sector (including its participation in private sector) submit data relevant to their roles in society. For example, “concerning factories,” Kautilya states that the registry book ought to tell the “extent of the following: gain and loss of material in the manufacturing process, expenses, additional weight, surcharge, admixture, location wages, and labor” (2.7.1-2). These line items are different from accounting ones because they are broader in scope, and they illustrate the most important facts and figures in a given segment of the economy or government. The officials can use this data to check against the accounting data to clamp down on fraudulent behavior (2.7.31). The government is deeply entrenched in the economy. Instituting these checks prevents government officials from participating in illicit activities such as embezzlement and fraud.

Vijay Murthy and Jim Rooney state that the management accounting prescribed in the Arthaśāstra serves to persuade organizational actors to abide by the values of wealth creation within the bounds of the Kautilyan society (Murthy p. 323). The core purpose of the Arthaśāstra is to instruct the ruler on being a good king. To do this, Kautilya believes that a heavy emphasis on maximizing the creation of wealth will provide the king the resources necessary to capture more territory and keep his subjects happy. Recall that the kingdom can be considered both a regulator and an active participant in the economy. Accounting standards enable the king, much

like an executive at a company, to review information and more efficiently deploy his capital in ventures that increase the aggregate wealth in the economy and the welfare of the subjects.

Without proper accounting standards, the ruler may never truly ascertain the economic health of certain enterprises, industries, and on a very broad scale, the kingdom. Access to this information enables the king to make informed decisions. The Arthaśāstra repeatedly advocates for governmental action to increase the quality of information and to make it more transparent, both to the king and the subjects. As Murthy and Rooney argue, accounting standards help bureaucrats understand the greater goals of the king and can maximize their own performance within the context of the greater administration. At the core, the strong emphasis on the flow of information points to Kautilya's desire to encourage informed, effective decision-making.

Taxation

The Kautilyan government generates revenues in two ways: Taxation and active participation in the economy. Taxation is a very central idea to the economic policy outlined in the Arthaśāstra. According to Jha, "Chanakya paid supreme importance to the maintenance of a rich treasury, which favourably affected entire activities of the administration" (Jha p. 298). Kautilya writes that the king should look after the treasury (2.8.1-2). The treasury's importance is clear. A strong treasury allows for a strong army. With a strong army, the king can win the earth (2.12.37). While the expansion of the kingdom by means of the army is important, taxes also enable the king to look after his subjects and ensure their well-being. In order to elaborate on the system of taxation, I will first explain the functions of the central Treasury and

Storehouse. Then I will discuss the system of taxation as a whole and explain some of its interesting aspects.

The Treasury and the Storehouse

Before understanding the types of policies that the Arthaśāstra outlines, we must first understand the institutions in place that enable a complex fiscal policy system to exist and thrive. The central institution is the Treasury. The management of the Treasury, which falls under the responsibilities of the Treasurer, is more of an abstract concept than a single place of storage of wealth. While there is a treasury building near the city center, the Treasurer also manages buildings along the countryside that hold permanent treasure in times of adversity (2.5.4). Hence, the Treasury is an institution that gathers the revenue generated and collected by the central administration. In addition to carrying money, the Treasury also holds precious items under the control of the king. Guided by experts in each commodity, the Treasurer should accept “precious stones, articles of high and low value, and forest produce” (2.11.1). Rare items that carry value like pearls, gems, foreign textiles, and animal skins belong in the treasury because they hold monetary value to the king. This store of wealth is important because it is also the source of capital for all government-funded initiatives. Kautilya declares what makes a good treasury:

Acquired lawfully either by his ancestors or by himself; consisting mainly of gold and silver; with a variety of large gems and coins; one that can withstand even a prolonged adversity when there is no income--these are the exemplary qualities of the treasury (6.1.10).

In tandem with the Treasury is the Storehouse. Also built by the Treasurer (2.5.5), the storehouse is managed by the Superintendent of the Storehouse (2.15.1). The Superintendent of the Storehouse must thoroughly understand the mechanics of the agriculture industry. He works closely alongside the Superintendent of Agriculture, who brings in taxes in the form of agricultural produce from the countryside and oversees the production of crop on royal lands. Think of the Storehouse as a very similar institution to the Treasury; while the Treasury holds currency and non-perishable wealth, the Storehouse holds agricultural produce, from grains, spices, and salts to vegetables, fruits, and meats.

The System of Taxation

The system of taxation is overseen by several officials, each with distinct responsibilities. In addition to the Treasurer and Superintendent of the Storehouse, Kautilya mandates the employment of a Collector and Revenue Officers. The Collector is essentially the accountant of the state. He manages the “financial statements” of the treasury and oversees all state income and expenditure (2.6). The Collector records and evaluates all income, which is a monumental task. To assist him with his core responsibilities, the Collector employs Revenue Officers. Revenue Officers report on “five-village [units]” or a “ten village [units]” (2.35.2). He understands these villages very well, and keeps a record of the important and relevant information from his jurisdiction (e.g. which villages enjoy tax exemptions, the primary economic activity of each village, etc.) (2.35). Under the Revenue Officer, the County Supervisors are assigned even more granular portion of the kingdom to manage. This hierarchical structure is important because it allows the king and Collector to focus on the big picture trends while lower level bureaucrats

monitor and enforce certain policies based on the needs of each village. The officials that oversee smaller divisions of the kingdom keep track of the small details: which households are exempt from taxes, the professions of the people, the number of animals, etc.

The Arthaśāstra advocates for a combination of direct and indirect taxes. I will follow the definition of Jorge Martinez-Vasquez, who states that direct taxes are those that can be adjusted to the characteristics of the taxpayer, while indirect taxes are those that are levied on transactions, regardless of who is buying and selling (Martinez-Vasquez p. 37). The simplest example of a direct tax is an income tax, which can be scaled with earnings. Common indirect taxes are customs and duties, which are transactions that could occur by any two individuals. It seems that the most commonly prescribed forms of taxes are direct in nature. They are usually applied on the total amount of production that a farmer or artisan produces in a given time frame. The most common indirect taxes are duties on imports and on commodities that the king has a royal monopoly over.

The different tax rates assessed in the Arthaśāstra illustrate some of the underlying motives of the King. The primary tax rate is about one-sixth part, or about 16%, for grains, flowers, fruits, vegetables, and other agricultural produce. In some instances, the effective tax is higher than this, and in other instances, the rate is lower. For example, the tax on imports is about one-fifth part, or 20%. This is to take advantage of traders who arrive at the kingdom to sell their goods. The difference in the taxes suggests that the king wants to protect internal producers from the threat of foreign traders. For internally produced items such as silk, armor, vermilion, and metals, the tax rate is only one-tenth portion, or about 10% (2.22.3-7). Some of the distinctions between different classes of goods follow little to no general pattern to the uninformed eye, and

there is not enough historical data to truly understand why each of these classes is assessed a different tax rate. The one consistent thing, however, is that agriculture, which is the most emphasized and prioritized industry, is taxed at around 16%.

Kautilya also seems to understand the way temporary suspensions of taxes can boost the productivity of an economic sector. For example, he believes in tax holidays for agricultural laborers. He claims that the king should give “uncultivated lands...to those who would cultivate them” and should make these lands “exempt from taxes” (2.1.9). We will explore the agriculture sector in greater detail in a subsequent section, but the tax holiday afforded to those who opt to cultivate untouched land is notable. According to B.A. Azhar and Sharouh M. Sharif, there is an empirical difference in the amount of financial investment and effort poured into a project if the government grants tax holidays (Azhar p. 419). Kautilya likely understands that the lack of taxes for two years incentivizes farmers to till their land and seek to harvest crop as soon as possible. Then, farmers can enjoy greater take-home yield in their first two years to help sustain their operations in the future.

Times of Emergency

An important aspect of Kautilyan fiscal policy is its scalability in times of need. In other words, the king can increase his capacity to collect revenue in times of need. The writers state “when his treasury is depleted and things have started to go badly for him, he should fill up the treasury” (5.2.1). During times of adversity, the king ought to deploy capital and gather resources to ensure the survival of his kingdom. When the treasury is strapped for cash and resources, Kautilya suggests several industries and populations that could help replenish it. For example,

Kautilya suggests the king collect revenue include taking one fourth of the produce from grain farmers and one sixth from the forest produce, both of which are increases from the tax rates stated earlier (5.2.14). He also believes that levying new taxes on traders could also be helpful, such as demanding one-fiftieth tax from dealers of gold and other gems, a one-twentieth tax from glass and other major artisans, and a one-half tax on performers and prostitutes. Kautilya also encourages some secret practices that “trick” the people into paying up to help the treasury. For example, he advocates that “keepers of prostitutes” should use “royal maids who are young women of exquisite beauty” to help restock the treasury (5.2.28). He also states that the king can have a shrine erected in the middle of the night, claim that it arose spontaneously, and collect money from the people under the guise of divine piety. Moreover, he says that the king’s agents should poison the subjects who doubt the divinity of the shrine and then declare that the shrine’s deity cursed them (5.2.39-44). These practices are only to be executed in times of dire need, but it shows how far Kautilya is willing to go to keep the king in power. Some of the other examples in the text contain similar levels of clever trickery, and it is abundantly clear that the text prioritizes the king over the subjects in times of emergency. Kautilya is clearly fearful that the king would face internal strife if he does not have the resources to project his power and execute his duties. The stability of the central authority and administration, based on this line of thinking, is a prerequisite to the stability of the kingdom.

Trade Regulation

Internal Trade - The Marketplace

Trade is the heart and soul of the Kautilyan economy. For the purpose of this discussion, I separate trade into internal and external (foreign) trade. Internal trade policy is relevant to local workers and artisans who are active participants in the economy. The heavy emphasis on trade illustrates Kautilya's understanding that a functioning trade environment means more money and goods circulating in the economy; hence, the king's subjects can enjoy greater prosperity.

Kautilya asserts that the location of trade is important. Specifically, he repeatedly refers to the "middle of the market street" (2.13.1). This implies that there is a central market street where merchants, artisans, and traders can sell their goods. This enables buyers to convene at one place to make their purchases as opposed to conducting business on a person-by-person basis. With regards to commodities, Kautilya mandates that the king ought to "assign to one location the transaction in commodities with a royal monopoly that are produced in his own land, but to multiple locations commodities from other lands" (2.16.4).

According to Lisa Herzog, competitive markets contain certain structural features that enable them to exist (Herzog pars. 4-5). Among these features, the most important include: a large number of buyers and sellers, comparable goods, and the absence of informational asymmetries. Mandating a predetermined location for the market, as Kautilya suggests, fulfills each of these requirements. To maximize the numbers of buyers to sellers and to maximize the number of sellers to buyers, a single marketplace attracts everyone. This enables customers to better understand the prices of a wide range of goods. Ultimately, having access to a variety of

products and prices increases information transparency and eliminates the informational asymmetries that would arise if commerce took place across many locations.

Since trade is a broad category of economic activity, Kautilya places the responsibility of oversight into the hands of one individual. The Superintendent of the Marketplace is tasked with monitoring commercial activity and trade. One of his primary responsibilities is to inspect equipment that is to be used for weighing and measuring (4.2.1-2). Regular monitoring of this equipment protects consumers from cheating and underdelivering by traders. Harsh fines provide an economic disincentive for this kind of behavior.

Another concern with a free market populated by private enterprise and private customers is collusion, which Kautilya is fully aware of and attempts to thwart. In fact, he states that “For artisans and craftsmen who collude in generating profit derived from lowering the quality of their work or impeding sales and purchases” or “collude in withholding commodities or selling them at an inordinate price, the fine is 1000 Paṇas” (4.2.21-22). Relative to many other fines, 1000 Paṇas can be detrimental to the existence of a business. It is considered one of the harshest punishments. Collusion is the decision by several players in a market to change their prices or reduce the quality to make a better margin on the products they sell. This usually causes undue financial burden on customers who are looking to buy. Moreover, collusion goes against the principle of competition, as would-be competitors work together to fix a more favorable price.

In order to monitor traders, Kautilya suggests the employment of agents. I will more thoroughly discuss the roles of secret agents in the economy in a subsequent section. Agents are appointed by the city’s Collector, and they should “find out the quantity and the value of king’s

goods originating in his own country and produced in pit mines, reservoirs, forests, factories, and fields” (2.35.8). This role serves multiple purposes. First, Kautilya believes in the importance of monitoring government-monopolized industries. This prevents illicit activity and unsanctioned competition. Government monopolies are extremely important to the health of the treasury, and loosening the grip on these monopolies would compromise the state’s ability to generate revenue. More importantly, the utilization of agents implies a general suspicion that traders are willing to conduct illicit activity to generate their own profits.

Foreign Trade

Kautilya undoubtedly believed that foreign trade is a critical component of a growing economy. By fleshing out a comprehensive trade policy—complete with rules about imports and exports—Kautilya ultimately advocates for trade activity insofar as it creates wealth and value for the native state’s constituents.

In the Kautilyan state, an official known as the Superintendent of Customs is in charge of managing most activity relative to trade. He sets up a customs house so that all foreign trade can be easily monitored at the foot of the flag (2.21.1,7). The foot of the flag is an important detail here because it is a symbolic representation of the king’s rule. Transactions done under the flag should be treated as transactions conducted under the king’s watch, so the rules of this particular government must be followed. This is a powerful regulation technique. “Customs collectors, [employed by the Superintendent of Customs,]...should write down with reference to the traders arrived in caravans—who they are, where they are from, how much merchandise they have, and where the identity card or the seal was issued” (2.21.2). Recordkeeping, as previously

mentioned, is important to the administration because it allows for better decision making. In this case, we can see the heavy emphasis on tracking everyone who sells goods from foreign lands.

In order to monitor traders, Kautilya employs secret agents. More bureaucracy in the form of officers would be redundant, but the lack of information transparency between officials and traders poses a problem for the king. Since he cannot constantly communicate with his officials because this would prevent them from doing their job, Kautilya believes that secret agents enable a king to effectively keep his ear to the ground to get a clearer idea of the loyalties of officials and subjects. Elia Armstrong, in a UN report on Economics and Social Affairs, writes that integrity, transparency, and accountability are inextricably linked in public administration. These are critical to gaining and keeping public trust, so fighting corruption ought to be one of the primary goals of a government (Armstrong p. 3). To this end, secret agents monitor the activity of foreign traders. They check the amount of toll, tax, ration, etc. that are being charged at the outposts (4.2). Secret agents can inconspicuously check whether foreign traders and bureaucrats abide by the letter of the law. This generally indicates a suspicion of both internal and external players in the economy. The king would be rightfully suspicious of foreigners because they may have intentions detrimental to the state. At the same time, the officials who enforce the law may be motivated by unethical factors, like bribes or other unethical arrangements with foreigners. Secret agents provide the perfect antidote to this potential problem. The mere threat of secret agents likely deters most illegal activity, but the enforcement of the law by secret agents helps the king identify weaknesses within his own administration and turn away potential external threats.

Kautilya is a strong proponent of trade and strongly believes in encouraging trade in the king's own kingdom. This manifests in Kautilya sometimes favoring foreign traders even at the cost of his own people's immediate interests. Rahman writes that the state strongly encourages traders dealing in imported goods. In fact, they enjoyed exemption from certain taxes, higher profit margins, and immunity from lawsuits. The profit margins allowed for the local merchants would be five percent for local commodities, while foreign traders are afforded a ten percent profit margin (Rahman p. 655). While legal institutions protect consumers from fraud, the Kautilyan government's favorable treatment of importers indicates a desire for foreign products to be readily available to the people. In fact, while native traders must sell their items in one location, as mentioned in the previous section, foreign traders can sell "commodities from other lands" at "multiple locations" (2.16.14). Selling commodities at other locations reduces the price transparency for a buyer because it eliminates the quantity of options that would be available at the central marketplace. This inherently increases the demand at the point of sale of a foreign good, thus increasing its value and the amount of money that foreigners can earn.

One unique feature of the policy on imports is called the "market tax." The traders should announce the quantity and a price of a commodity that has reached the foot of the flag. (2. 21.7). Once the traders arrive at the flag, they announce the price and quantity of their items. If multiple buyers compete for a limited amount of imported product, then the economic value of the product would increase. This incentivizes the trader to allow the price to be bid up. In order to access the increase in economic value of a particular product, Kautilya states that "the increase in price along with the customs duty goes to the treasury" (2.21.9). According to Harald Wiese of the University of Leipzig, this kind of tax is known as a "market tax." A market tax is assessed

when there is a difference between the trader's stated value and the highest bid. According to Wiese, Kautilya has structured this tax such that the treasury receives revenue from all imported goods (Wiese p. 705). To prevent the seller from assigning a value that is too high, Kautilya declares that the traders may not assign a value for their products that is outside of the bounds of "normal" prices, the trader must pay twice the customs duty (2.21.12).

Monitoring and Fines

Danda (the stick of punishment) is an important concept in the Arthaśāstra. Kautilya includes many examples in each book and chapter of when fines ought to be assessed to punish immoral behaviour. The willingness to use force by the king, through both physical and monetary action, gives the king the power to enforce his policies. The following quote describes this quite aptly:

People belonging to the four social classes and orders of life, when they are governed by the king through punishment, become devoted to the Law and activities specific to them and follow their respective paths (1.4.16).

Punishment is viewed as a necessary prerequisite to a strong economy and the well-being of the people. People need a coercive power to incentivize them to act according to the norms of a functioning society. However, Kautilya also cautions against the use of force and punishment inappropriately. He states that "when it is dispensed improperly, whether in passion or anger or through contempt, it incites even forest hermits and wandering ascetics to revolt" (1.4.12).

There are plenty of examples throughout the Arthaśāstra of fines, some of which are listed throughout this thesis. Some are small fines and others are huge. For example, the fine “for goldsmiths purchasing silver or gold in its original form from a dishonest person without reporting” is “12 Paṇas; in an altered form, 24 Paṇas; from a thief, 48 Paṇas” (4.1.26). The key takeaway here is that Kautilya attempts to make each punishment proportional to the egregiousness of the infraction. When he really wants to disincentivize something, he will administer harsh punishments. For example, to prevent collusion, he threatens traders with fines of 1000 Paṇas (1.4.21). Compared to the infraction of someone buying gold from a thief, the act of collusion looks much worse. Looking at these punishments and how they differ gives us an idea of how much Kautilya wanted the king to prevent certain actions by his people.

To find people who are committing illegal actions, the king utilizes both public and secret bureaucrats. As discussed earlier, the use of spies and secret agents enables the king to test the loyalty of those who work for him and private traders and sellers. While the Superintendents under the administration also assess punishments, the real emphasis on the enforcement of law and punishment can be seen with the use of these secret agents. Ultimately the use of punishment serves one purpose for the king: to ensure that his policies are followed, and his desired economic outcomes are achieved.

In this section I have discussed Kautilya’s prescribed regulatory policy actions regarding the economy. While it is not comprehensive, it paints quite a clear picture of how the Kautilyan economy is supposed to function and how it is maintained. We can clearly see certain themes, such as wariness of people’s intentions, caring for the king’s subjects, and a fear of uncontrollable calamities. These ideas strongly point towards the core motivations underlying

these principles, which will be discussed at length in Chapter 4. The next chapter will also touch upon these ideas; however, it will focus on the government's direct participation in the economy rather than as a regulatory and merely political body.

CHAPTER 3: DIRECT PARTICIPATION BY THE GOVERNMENT

The Kautilyan state is very active in the regulation of the economy, as discussed in the previous section. Perhaps more influential to economic outcomes is the government's direct participation in the economy through the form of direct investments and monopolies. The state's role in industry is interesting because the government is an "economic enterprise, similar to private enterprises, in competition with some of them, in partnership with others." However, unlike "private entrepreneurs, the king was also the keeper of law and order" (Trautmann p. 5). Hence, the king's administration officiates the very same game that it plays. In this section, I will discuss three primary means through which the king is an active player in the economy. I will discuss the government's direct investment initiatives, the system of agriculture, the royal monopolies, and competition with private sector.

Infrastructure Investment

The king is instructed to directly invest in infrastructure. Kautilya views investments in infrastructure and land development as critical components of a healthy economy. While these investments cost the king money, time, and labor, the payout is increased internal commerce and more taxable earnings.

The Arthaśāstra declares that the construction of the fort is the responsibility of the king. In this section, there is an emphasis on infrastructure that will help information, resources, and commerce flow freely throughout the kingdom. For example, the kingdom should include royal highways, roads, water canals, and drainage ditches (2.4.1-3). Two things are striking to me.

First, the emphasis on highways and roads. This implies that the system that Kautilya advocates for is not simple, but multilayered and complex. It takes into account various districts and provinces within the same kingdom and proves that he believes that roads with greater capacity (specifically, the highways) are needed to allow for seamless transport. Second, Kautilya's mention of water canals and drainage ditches suggests a strong understanding of water-logging and the importance of access to water. Each of these is pivotal to the success of an economy because they enable robust internal trade and commerce within the kingdom.

Kautilya believes infrastructure is important for growing external trade in addition to internal trade. Kautilya writes that the king should “set up operations of...water routes, land routes, and ports” (2.1.18) so that kingdom can maintain economic relations with traders from foreign lands. The emphasis on foreign trade is evident in the way Kautilya advises the king to manage the roads. He writes that the king “should keep trade routes clear when they are oppressed by his favorites, work officers, robbers, and Frontier Commanders, or worn out by herds of farm animals” (2.1.38). Even those who work for the government or are closely associated with the king are disallowed from disrupting roads. Between the surveillance and maintenance of roads, the state commits capital and resources that result in some sort of payoff. Unobstructed and well-maintained roads are critical to the health of the state because they support commerce and activity, which in turn widen and broaden the tax base available to the royal treasury.

Infrastructure ventures are not necessarily always sure bets. In fact, the king may not believe that the payout for a certain project will surely generate more money for the treasury. However, the chance that it does still exists. In these cases, the king need not undertake these

infrastructure projects solely with his personal capital. Since these are large financial burdens and private citizens and businesses will ultimately benefit from them as well, Kautilya advises the king to look to the private sector as well. Joint ventures allow the king to spread his risk in these initiatives and can acquire more manpower and capital for the projects to come to fruition (2.1.22).

Civilizations of the successful empires of Egypt, Mesopotamia, India, and China all have at least one thing in common—strong infrastructure. According to Cesare Marchetti, ancient empires constructed infrastructure to disseminate products, people, and information (Marchetti p. 373). Kautilya’s economic policy includes a strong emphasis on building roads, reservoirs, and irrigation systems for the same reason. This level of direct participation of the king shows that Kautilya knows the importance of infrastructure. He views it as necessary to the growth of trade and commerce, and hence, the king’s treasury.

Agriculture

Agriculture is one of the most important aspects of the Kautilyan economy. In order to enjoy a strong agricultural sector, a kingdom must have ample land. This begs the question: who owns the land, and how is it distributed? Initially, in the event of an expansion, the state controls all land and can control its uses. One of the first enumerated responsibilities in the Arthaśāstra is to effectively settle the land. The king must give land to those motivated to farm for agriculture. cannot give arable land to hermits and must only allow those who will cultivate the land to settle (2.1.32). Hence, real estate is highly regulated, and the government executes the primary allotment of land to the citizens. “Farmers have only life interests in fields that have been given

by the king, but it appears that these life interest contracts eventually become hereditary”

(Trautmann). The Arthaśāstra instructs the king to carefully oversee the settlement of land with the ultimate goal of boosting production. In fact, it is stated that there are to be no parks, and actors, dancers, singers, musicians, bards, and performers are not to interfere with work.

(2.1.33-34). Kautilya views these activities as hampering the efficiency of production. Then, Kautilya writes that “when villages do not provide shelter and men are intent on cultivation, they create increases in treasure, labor, goods, grains, and juices” (2.1.35). Villages that provide shelter shield people from the risks of being entrepreneurial and depending on others for survival. Kautilya believes that if each household control its own tract of land, they will be incentivized to produce more for sustenance. The treasure, according to Olivelle, refers to the King’s treasury and wealth. Greater production broadens and strengthens the king’s taxable base.

The following table (Figure 1) helps explain the breakdown of land in the Kautilyan economy. All of the distinctions between are at the discretion of the king’s administration. As you can see, the arable land is split up between crown land and private land. Crown land is managed by officials in the administration whereas private land is tilled and cultivated by private household. These private households pay a tax on their total production to help fill up the storehouse. If the farmers are able to sell what they produce, the tax is assessed on their earnings. This is the basis of the largest taxable sector of the economy, and is considered the backbone of the economic health of the kingdom.

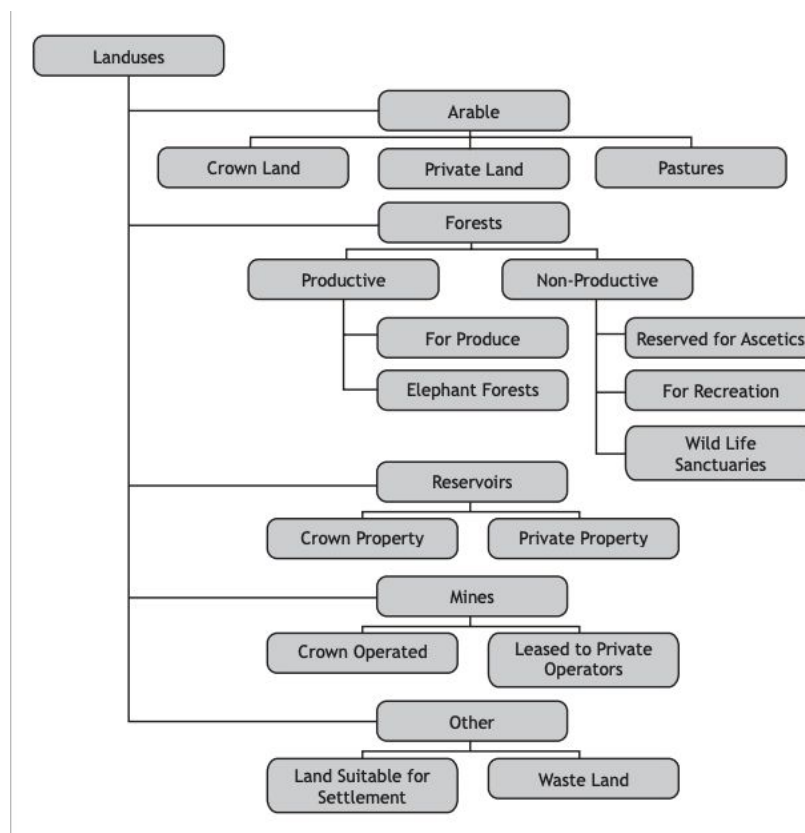


Figure 1- *Source: L.N. Rangarajan*

This system of land distribution is not unique to the Kautilyan economy. There are several instances of governments in the twentieth century implementing similar policies and achieving the result of greater agricultural output. During China's Great Leap Forward policies in the 1950s, land taken from wealthy landlords was subsequently redistributed in a more egalitarian manner in order to incentivize greater production. Other agrarian reform strategies by governments have also been implemented over the years, some yielding successful results and others failing mightily. In a comprehensive metastudy, Dietrich Vollrath found that there is a significant correlation between egalitarianism of land distribution and per-household agricultural output (Vollrath pp.14-15). Of course, these assertions are contingent on the lack of advanced

technology that enables the economies of scale achieved by corporations today. The underlying intuition is relatively simple. If there are many farmers in the economy that rely on the sale of their own crops to sustain their livelihood, then the total amount of agricultural production in the economy increases. If a Kautilyan king fails to implement such a policy, land would be distributed unevenly, with the wealthy accumulating more land. This may lead to less agricultural output than would be ideal.

Even if it does not lead to the greatest total output, Kautilya may have also believed that land distribution should give everyone opportunities to sustain themselves and their families. This is likely not driven by purely humanitarian intentions; rather, the king ideally would preempt mutiny this way. When land passes on to only a select segment of society, the ability to generate wealth also becomes concentrated in their hands. At no fault of their own, others must resort to other means to generate wealth. Kautilya also goes against the grain of tradition by discouraging people from passing on all of their land to only one of their children (3.5.16-17). Such examples of Kautilya's emphasis on egalitarian land distribution show that he wants to increase access to opportunity for civilians in the kingdom. If this were not the case, people may see the king as unjust and feel compelled to revolt against him. This, in addition to the desire for greater agricultural output, drive most of the king's policies regarding agriculture.

Monopolies

The state controls two broad categories of industry through royal monopolies—forests and mines. Monopolies are powerful because all related activity is monitored and regulated by the state. These monopolies enable the king to do two things: control the supply (and price) of

various commodities within the empire; and earn revenues that would go directly into the royal treasury. While traditional monopolies are controlled and operated by the same entity, control over certain industries permits the state to sell leases and impose taxes and fines on those who seek to compete. According to the Arthaśāstra, the state holds monopolies in a variety of industries, but I have isolated the few that are likely to have a disproportionately large impact on the wealth of the nation and health of the economy: forests and mines.

Forests

Recall that not all land that is suitable for cultivation. Much of the remaining land still has immense value to the king. The Arthaśāstra considers the next most productive tracts of land to be “forests”. Forests in this economy have three primary uses: to collect produce, to provide leisure for the king, and to find, raise, and care for elephants.

The most economically and socially consequential use for the forest is to capture “forest produce,” or the natural resources that can be extracted from a forest without disrupting nature. The official in charge of these forests is known as the “Superintendent of Forest Produce.” The Superintendent of Forest Produce is tasked with capturing economic value from forests. Forest produce includes hard woods, reeds, vines, plants, ropes, leaves, flowers, poisons, medicines, and clay. In order to extract these materials from the forest, the superintendent must “have the guards of the produce forests bring in the forest produce” and “should establish factories” to regulate and organize the output (2.17). These forests are not to be cut down (except in times of adversity) and perpetrators can be penalized heavily for doing so. Kautilya sees immense value in preserving forests rather than making it exclusively farmland for agriculture; hence, the

private sector is prohibited from using forests for commercial reasons. The raw materials from the forests are unique to forests, and the constituents of the state would lose access to them if they were turned into farmland.

The second, less important use for a forest is as a reserve. In a reserve, the king would have the ability to hunt game, enjoy nature, and relax. Each reserve is isolated by the construction of a moat, (2.2.1-7) and access to the reserves is restricted to the King and his close associates. These forests are likely small relative to the others because they serve the very few people (royal family) and provide little to no additional commercial value to either the private sector of the king's treasury. This is one of the select parts of the Arthaśāstra that emphasizes the luxuries enjoyed by the king. Most of the text is directly related to the king's *duties* rather than his privileges. For this reason, the inclusion of these nature reserves in Kautilya's discussion of important uses of forests is interesting.

The third use for forests is to rear elephants. Elephants are considered a pivotal aspect of the military. The Superintendent of Elephant Forests is tasked with maintaining the land and its surveilling the boundaries at all times. Elephant-forest wardens, assisted by elephant keepers, are to observe and care for the elephants (2.2.10). These workers ensure the health and safety of elephants. The Kautilya believes elephants are critical to the success of the kingdom. In fact, the text states that "A king's victory is led by elephants, for elephants, with their enormous bodies and lethal onslaughts, can crush an enemy's troops, battle arrays, forts, and military camps" (2.2.13-14). The role that elephants play in the army grants them protection by the king's administration. If civilians or enemies kill these elephants, Kautilya states that those criminals

must be put to death—the ultimate deterrent (2.2.8). The importance of the elephants is not directly economic, but this offers hints as to where the army sits on the king's list of priorities.

The heavy emphasis on elephant-rearing strongly suggests that the king ought to pursue hard power. The elephants of Kautilya's time were important to the military strength of a kingdom. Elephants are naturally tame and peaceful, but South Asian armies methodically trained elephants to become more capable in war. They were taught to jump over fences, trample enemies, and fight other elephants, giving armies great advantages over their enemies (Nossov). Over generations, these kingdoms developed obedient, powerful, and combative elephants that helped in wartime and enabled the king to project his military strength.

Forests are very important to the king because they are a source of economic and military power. Without a complete monopoly over these lands, the kingdom would likely lose these lands. In other ancient civilizations, such as the Greek and Roman empires, deforestation was a byproduct of human activity. Forests contain timber, a valuable resource in the development of ancient cities. Moreover, forests needed to be cleared to make way for a sprawling city (Hughes p. 60). Deforestation would occur with the lack of oversight by the monarch. This is a unique and important aspect of Kautilya's policies. However, it was likely not driven by solely desire to conserve the forests because they are inherently valuable. The king has a strong interest in preserving the forests because of the immense benefits from the raw materials and the elephant reserves.

Mines

One of the most powerful and sustainable sources of income to the king is his monopoly over the mines. Essentially, the extraction of metals, rocks, and other raw materials from the ground. In controlling mines, the king can control the total supply, and consequently, the prices, of commodities important to the economy. There are many government officials involved with the royal operations regarding mines. The Superintendent of Mines oversees the mines on a broad level. He is tasked with being knowledgeable about the various ores and setting up the actual operations and factories. Kautilya states that the Superintendent of Mines also must set up the operations of factories to go along with each individual commodity. Since the working conditions at mines are generally unsafe and undesirable, finding labor is difficult. Hence, Kautilya advocates for the use of criminals to be put to work in the mines (2.12.18). The second solution is to lease out the mines to private contractors and collect the lease revenue in addition to any surplus captured by the private enterprise (2.12.21). This ensures that both labor costs and operational risk can be spread out, and the state's cash flows become less risky (because of the lease arrangements and associated charges/expenses). These mines provide the inputs for the metal factories, controlled by the Superintendent of Metals, who processes raw materials and sells refined metal to other branches of the public enterprise (for coinage and storehouse) and to private manufacturers.

Other related monopolies include important operations in the pit mines and the salt mines. These are overseen by the Superintendent of Pit Mines and the Superintendent of Salt. In the pit mines, the workers find high value commodities such as gems and diamonds to provide wealth to the king. The Superintendent of Salt oversees one of the most regulated commodities in

the kingdom (2.12.28). Since salt is a critical component of human diet and is our primary source of sodium (“Salt”), sales of salt are highly predictable in the long run. This makes salt the perfect commodity to enable the king to capture a predictable economic surplus while preventing private sellers from unjustly marking up the price.

While the Superintendent of Mines, Salt, and Pit Mines focus on the operational side of the mining business, the Superintendent of Commodities concerns himself with the money. This Superintendent must always be conscious of price trends for various commodities over time and buy and sell commodities in accordance with these trends. To increase the revenue generated from the mines, he should consolidate the sale of each commodity in one place, away from the sources of each product, so that he can control the supply and demand differentials—and, consequently, the price (2.16.2). Despite this flexibility and unlimited earning potential, these profits cannot be generated at the expense of the subjects’ welfare (2.16.6). Kautilya deeply emphasizes the general welfare of the subjects many times in this text. He seeks to strike the balance between earning revenues for the treasury and offering essential products for a reasonable price.

Why is control over the mines so important to the state? Kautilya offers the following explanation to elucidate the king why mines are critical to the king’s overall goals: “The treasury originates from mines, and the army is born from the treasury; the earth is adorned by the treasury and is obtained through the treasury and the army” (2.12.37). The goal of expanding the kingdom and the goal of expanding the treasury go hand-in-hand. This implies that each objective of the king—to expand and to generate wealth—helps the king accomplish the other. War is expensive. To compensate loyal fighters, materials, equipment, battle elephants, and

training, the king must have the adequate funds. Without a treasury, the king cannot fund a robust army. Without a robust army, the king would be unable to expand his access to raw materials and earthly resources. Recall that the king already has in place an extensive taxation system, complete with in-kind payment requirements and monetary contributions to the Treasury. However, Kautilya believes that state control over these commodities is even more important to the long term economic health of the kingdom. A lack of raw materials would inevitably result in the demise of the economy and the army, and eventually, the king himself.

Kautilya also suggests a secondary motivation for the state-controlled monopolies. In Chapter 16 of Book 2, Kautilya writes that the Superintendent of Commodities should forgo even a large profit if it will cause hardship to his subjects (2.16.6). While there is no bright line for what constitutes a “hardship” to the private citizens, the Arthaśāstra reminds the king that one of his most important duties is to uphold the welfare and contentedness of the people. In instances where the people desperately need a resource for survival, the demand becomes so high that the price that the seller can demand would also be very high. However, the willingness to forgo a large profit at the expense of subjects means that the Superintendent ought to be alright with taking less than the true economic value of the commodity, which would be determined by the free market. If these commodities were left to other private miners and sellers, then there would be little to no incentive to drop prices simply to appease the masses. Ultimately, this pricing power is simply one lever at the king’s disposal to balance the robustness of the economy and the welfare of the people.

The monopoly over the mines is illustrative of Kautilya’s thought on traders. He scoffs that “traders, conspiring with each other and raising or lowering the prices of commodities, live

off it by making a profit of a hundred Paṇas on a single Paṇa” (8.4.36). While Kautilya believes traders are important to the economy, he clearly believes that they make money by colluding with one another and driving up prices. He believes they are motivated by greed as opposed to the welfare of the people. By controlling certain industries and taking them out of the hands of such traders, Kautilya believes the king would be doing everyone a favor.

Revenue from the state’s direct involvement in these monopolies is interesting when juxtaposing it to the revenue from the system of fines and taxation. While both generate revenue, investment in government initiatives also provides employment and commercial activity. The effect that this type of spending can have in an economy is known as the multiplier effect (Christiano et al p. 2). Suppose that the Kautilyan government spends money on a mining project. This capital becomes wages for government employees and revenue for the private entities that partner with the state. Now, the amount of money circulating in the economy has increased, as the people working on the project have more disposable income and spending power. This causes aggregate demand in an economy to increase and stimulates growth. While Kautilya may not have been explicitly aware of this fiscal multiplier effect, he definitely saw value in employing people through government expenditure in addition to implementing taxes.

Competing with the Private Sector

In several industries within the economy, Kautilya mandates that the central administration plays the role of a competitor and regulator. In addition to regulating these activities very closely for various reasons, the government also resembles a private enterprise, producing and selling alongside private-sector entities. The activities in which this happen

include adult entertainment, yarn, weaponry, and others. Adult entertainment includes the production, sale, and distribution of alcohol and the management of prostitution and brothels. The government has an interest in closely regulating these industries because they are not critical to the economy and can easily be abused. If abused, these activities could become severe liabilities socially as well as economically if too many people are spending too much time in these establishments.

Along with the other adult entertainment, the government also competes and regulates the gambling industries. The King appoints a Superintendent of Gambling, who is tasked with setting the location at one place (3.20.1). This is likely for the purposes of regulation and direct participation in this economic segment. Kautilya takes a very balanced and pragmatic approach with this topic because he acknowledges that it would take place even if the king outlawed it. Gambling is a liability to the government and in an ideal world it would not exist as an institution. To remedy this, the king declares that gamblers must rent government-provided and regulated shells, dice, leather, and other equipment necessary for gambling. On top of that, the Superintendent of Gambling takes 5% of all of the winnings (3.21.10), which is low cost revenue for the king. This makes gambling a more expensive activity and may deter people from engaging. More importantly, though, it showcases how the government has the ability to take part in the economy to capitalize on human nature.

These establishments were also used for another purpose: monitoring people. Spies were supposed to ascertain the amount of money spent by regular and occasional customers, and beautiful slaves were sent to find out about strangers (2.25.11-15). Since these establishments were open to the public and often had areas for travellers to sleep, the King could gather

information about people and assess punishments accordingly. This adds to the evidence that the king is always screening for threats and rule-breakers with the intention of punishing them for their unrighteous actions.

Through investing in infrastructure, maintaining several monopolies, and through competing with the private sector, the Kautilyan economy's engine is clearly the government's own set of ventures. These activities illustrate the great deal of power that the king yields with regards to employment, prices and distribution of important commodities, and other central economic features of the kingdom. This level of economic power as a direct participant is notable because of the concurrent role in regulation. The king's administration plays in the very same game that it is officiating, constantly giving itself an advantage over other participants. Ultimately, this comes down to stocking the treasury and employing constituents to increase welfare and quality of life. A more in-depth analysis of why the king wants to do this is included in the next section.

CHAPTER 4: THE STATE'S PRIMARY MOTIVATIONS

In this section I explain some possible motivations for why the Arthaśāstra prescribes that the king take certain economic actions. I argue that political realism carries great explanatory power regarding these policy actions. In short, the king's general insecurity drives the policies, most of which serve to preserve or increase the king's power. To further elaborate on this point, I will first explain political realism and link it to Kautilya. Then, I will explain the key underlying motivations of the king: a desire for growth, a duty to increase the welfare of subjects, a general suspicion of both internal and external agents, and a fear of disaster.

Note on Realism and the Insecurity of the King

Several academics consider Kautilya's Arthaśāstra to be among the first instances of written political realism. W. Julian Korab-Karpowicz asserts that political realism is a "view of international politics that stresses its competitive and conflictual side. It is usually contrasted with idealism or liberalism, which tends to emphasize cooperation" (Korab-Karpowicz par. 1). The idea of realism is rooted in human nature. Realists consider humans to be generally self-interested, and in the absence of an ultimate authority, agents within the international system act to ensure their own survival and increase its relative power. A realist would assert that domestic policy is shaped by the tensions of foreign tensions as opposed to the inverse (foreign policy stances being shaped by domestic values). This is because the tensions of insecurity drive the decision-making of a leader (Souva p. 155). One of my central arguments is that realism--the

general feeling of insecurity by the king--explains many of the economic decisions of the Arthaśāstra.

Researchers such as Roger Boesche and Stuart Gray draw comparisons between Kautilya and Machiavelli, noting the striking similarities between the two writers' thoughts on political thinking. Boesche, in his book *The First Great Political Realist*, argues that Kautilya placed great importance on the primacy of the state (and the king). He presents examples of the ruler and the government administration being regarded as even more important than religion and social classes. Boesche writes that Kautilya "knew that one can more easily conquer a disunited and isolated populace," so the centrality of the king and his incentives is critical to the strength of the state (Boesche p. 54). Pravin Chandrasekaran corroborates that Kautilya's work is "so deep rooted in realism that he goes to describe the gory and brutal means a King must adopt to be in power" (Chandrasekaran p. 4).

Along the lines of political realism, the king faces tensions from several different core desires. The first is that the king wants to gain territory because not doing so means that other kings, potential threats to his power, are getting stronger and capturing more land and resources. The king is also compelled to keep his subjects happy and has a strong interest in maintaining their general welfare. If a king were to neglect this duty, internal threats to his legitimacy would become a concern. Kautilya also writes that kings who behave righteously (in the best interest of his people) will enjoy support and loyalty from his subjects in times of conflict and war. A third tension that the king faces is the uncertainty of what other foreign actors will do and the extent of their resources and capabilities. Since information about other kingdoms would always be incomplete, the king is generally urged to act in inherently self-interested ways to stay in power.

The frustration that arises from balancing these three tensions lend credence to the realist claim that the Kautilyan monarch is deeply motivated by feelings of caution and insecurity.

Desire for Growth

The economic policy of the Arthaśāstra is complex and thorough, which lends credence to the extensive research and analysis conducted on the topic. The government intervenes in the economy by both setting rules for all of the private players and by actively participating in multiple sectors of the economy. Each policy instrument is instituted for various reasons, but one of the key purposes of the state—and the Arthaśāstra itself—is to maximize the generation of wealth to ensure the well-being of the people. The emphasis on growth here pertains to the king's desire to expand the total land under his control. The king ought to “settle the countryside—whether it has been settled before or has never been settled—by forcing people out of enemy territories” (2.1.1). As more land falls under the state's control, the greater the number of resources that the kingdom can monetize. An abundance of raw materials translates to immense material wealth. This wealth, which the government can capture in its treasury, can be spent on expanding and strengthening the army.

Growth of Wealth

The motivations of the economic interventions outlined in previous sections conforms with the general idea of realism. Wealth generation and maximization enables the king to remain in power by providing resources to combat challengers to his legitimacy. More importantly, it gives him options in the future that would otherwise be restricted by a lack of capital. By generating wealth through broadening his tax base and direct government investments, the king

can afford to increase the power of his army. There is little doubt that this is one of the king's utmost priorities. Under the realist framework, we can see that with an increase in the reserves in the treasury, the king can feel more secure because he has greater ability to combat external threats with the proper force.

The king has many options to monetize new land. He can actively employ state resources to extract the value from this land. As mentioned in the previous sections, he can set up mines and production factories with a royal monopoly. Alternatively, he can settle new land with his own farmers who are willing to till it and grow crops for the storehouse. He can also set up forests where rarer resources, like medicines, poisons, and vines. The forests can also yield elephants, which would provide immense value to the hard power of the kingdom. If the king decides he would rather not take on this level of risk, he can partner with the private sector. Through leases and licenses, the private sector can work alongside the government on any number of ventures. The state would earn fees and taxes from these operations. If the king would rather settle the land with private citizens, he can opt to do that as well. If the land is efficiently utilized, then the treasury would collect tax revenue. Each of these actions would enable the king to increase the power of his kingdom.

There is no question that Kautilya also advocates for optimal productivity. Evidence of this can be seen throughout the text. For example, the royal administration's careful parsing of land for different purposes shows how no land should be wasted. The king also believes that artisans ought to be actively selling their products. Between royal farmlands, private farmlands, and forests, Kautilya believes in constantly encouraging production. To encourage productivity, the king also allows new landowners to be exempt from taxes to incentivize them to cultivate

their land efficiently. The two caveats to this point are the preservation of forests and the land distribution. The preservation of forests ultimately is an example of Kautilya understanding the value of scarce resources that can only be found in nature. The policy for land distribution, which favors a more egalitarian distribution of land, ultimately aims to thwart the efforts of people to amass great quantities of land at the expense of others.

Growth of Power

John Mearsheimer, one of the leading thinkers on realism, writes that power is “based on the material capabilities that a state controls.” However, he also states that states have another kind of power, known as “latent power” (Mearsheimer p. 72). Latent power is comprised of the state’s wealth and the population. These latent power forces are indicators of future material power capabilities, which is why they are immensely valuable to a state. Kautilya seems to follow this general framework quite closely. The material capabilities refers to the military power that the king continuously builds through the army, elephants, weapons, armor, etc. Among the latent power categories, Kautilya obviously emphasizes the growth of wealth, as evidenced by this paper. Expanding the population of the kingdom is important and primarily possible by ensuring a greater quality of life for citizens and expansion into other territories.

The standardization practices of accounting and recordkeeping in the Kautilyan state indicate a well thought out process to inform the king on his decisions. By examining this data, he can make better decisions regarding the allocation of capital and manpower. This plays into the king’s desire to increase wealth and power, the latent factors of power. He constantly wants

to replenish his army which, takes an expanding treasury, which is only possible with the king making well-informed decisions.

The desire for growth is evident throughout the text. Kautilya believes that the king ought to remain in power, and oftentimes, expanding his wealth and scope of his power are the only actionable ways one accomplish this. Both explicitly and implicitly, Kautilya explains that the king's quest to gather resources and build up his hard power enables him to feel more secure. Many of the economic policies outlined previously conform to this framework.

Desire for the Well-Being and Docility of the Citizens

Just like most governments, the Kautilyan state is strongly inclined to look after its subjects and ensure their happiness. This is his utmost priority. A king's happiness "lies in the happiness of his subjects; and his welfare in the welfare of his subjects; a king's welfare consists not in what pleases him but in what pleases his subjects" (1.19.34). This quote showcases one of the central themes of the Arthaśāstra. This idea of "happiness" can be interpreted as contentment or docility. Kautilya understands that people have certain desires and needs. He urges the King to pay very close attention to these needs because they drive the actions of the people. If they are deprived of these, then the king's power faces an internal threat to its legitimacy. Gray posits that identifying the core purpose of the Arthaśāstra as prioritizing only artha (wealth) as being overly simplistic. He argues that artha ought to be prioritized alongside the other core human goals--dharma (duty/law), kama (physical delights), and moksha (liberation from the cycle of birth and death) (Gray p. 640). The king helps people in their pursuit of these other things by ensuring their wealth. Kautilya clearly recognizes that wealth alone will not result in the welfare

of the people, but without wealth and material prosperity, people will feel restricted and unable to reach for these other goals.

Throughout the text, Kautilya also declares that the king ought to look after his subjects like a father looks after his own children. This proposed dynamic between the king and his subjects is illustrative of the kind of care and attention required by the king to maintain widespread support. This is called “royal paternalism,” and is a theme at several points in the text (Boesche p. 34). For example, Kautilya writes that the king ought to be caring, and “like a father, he should render support to those who have been afflicted” (4.3.43). While the king himself is supposed to support children, the elderly, and helpless people (2.1.26), women, minors, and old people are to be supported by the king’s judges (3.20.22).

These public actions and portrayals of the king as a father have strong political and practical reasons. There are examples of Kautilya explaining the tangible benefits to ensuring the welfare of citizens and following the kingly duties. One of the tensions faced by the king is the public opinion of him. Ultimately this opinion is important for the king to retain power. For example, on the topic of foreign invasion, Kautilya writes that: “When attacked, the subjects will not render assistance to a strong ruler behaving unrighteously; they will make him flee” (7.5.15). The notable aspect of this statement is the threat of being unseated as the king. Losing this position is considered a product of being a poor king, so the incentives in the Arthaśāstra are aligned such that the king should, on net, remain fair and compassionate to his subjects. This strongly suggests that projecting that the king cares for the people strengthens his ability to retain their loyalty when the kingdom’s sovereignty is challenged.

Moreover, Kautilya connects poverty to instability for a leader. He writes that poverty amongst the people causes greed. Greed can lead to disloyalty, which can result in people taking action against the king or can cause them to join the enemy (7.5.46). Resultantly, the king has a strong interest in ensuring the financial welfare of his subjects. Causing economic hardship from the governmental level will backfire, according to Kautilya. This helps explain some of the regulatory actions taken by the king. For example, when the economic value of important commodities such as salt causes distress amongst the subject, the Superintendent of Salt ought to reduce the price of the item. Accepting a lower price for a commodity is one example of the king sacrificing his own economic motives in favor of a more robust, long-term goal: the support of his people.

The king also has another goal in being a well-respected ruler. Mearsheimer draws a strong connection between nationalism and realism. He states that while nationalism is not among the key variables of realism, it plays a necessary role in realist logic. He argues that nationalism causes people to place immense value on their own cultural identity. This makes them seek control over their own political fate and assist their leaders in the power politics that occur at the national level (Mearsheimer pp. 8-9). Even though Mearsheimer's argument refers to modern nations, states, and warfare, the underlying principles of his stance have significant explanatory power with regards to the Arthaśāstra. If the king's subjects feel a sense of identity with the monarch, they are more likely to support the kingdom when war is imminent. Thus, I argue that the king's actions reflect a combination of self interest as well as fulfilling his obligations to his people.

Suspicion of Internal and External Agents

Looking deeper into the *audience* of the Arthaśāstra provides valuable insight with regards to the underlying motivations for the state's role in the economy. Kautilya writes directly to the king to provide comprehensive and thorough instruction. For this reason, the Arthaśāstra strongly recommends that the king remain cautious at every corner, and states that regular surveillance of both private citizens and public officials are necessary. According to Olivelle, the king's secret service tests the integrity of government officials when necessary (Olivelle pp. 48). This provides a second layer of oversight in addition to the audit and inspection activities that occur. More importantly, it indicates that the king does not blindly trust anyone--even those who are supposed to be loyal to him. There are heavy fines associated with being caught breaking the law.

Kautilya sees trade as necessary, but also an area of vulnerability. As previously described, traders both from within and from outside the kingdom are treated with immense caution. All traders are carefully monitored by a collection of officials and spies, with all of their products examined and their profits controlled. Kautilya fears that these traders, motivated by free market forces, would act in inherently self-interested ways. While the market also requires the traders to act under this framework, self-interest in the absence of regulation and oversight can turn into price-gouging and profiteering. There is no way to determine whether historically traders acted in this way, but the incentives make sense. Each trader is supposed to announce where they are from and what they are carrying to prevent spies from other kingdoms from entering unannounced. Recall that taverns and gambling areas are controlled by the state for exactly this reason. Boesche writes that the king being able to monitor people while *they* are

vulnerable gives the king an upper hand in terms of information flow (Boesche p. 41). He can assess threats as they arise and take care of them immediately.

While political realists focus primarily on the tensions of the international system, they keep a close eye on internal changes as well because there could be internal threats to their power. Stephen Strauss-Walsh states that suspicion is inherent to the realist line of thinking. Specifically, he writes that realists are suspicious of internal insurrections because of the threat to their own claim to power (Strauss-Walsh pp. 1-2). Kautilya, clearly a realist, believes the same thing.

Fear of Disaster

Understandably, one of the primary motivations for the Kautilyan economy is the fear of disaster. In book 4 of the Arthaśāstra, Kautilya discusses remedial measures against disaster. He isolates eight dangers “arising from fate”: fire, water, disease, famine, rats, vicious animals, snakes, and demons (4.3.1). The word “fate” strongly implies that Kautilya believes these disasters lie outside of the control of the king. As the ultimate actor and decision maker, the king ought to take responsibility for other disasters such as war, but the king’s management of related issues are discussed in the later books of the Arthaśāstra. For each of the major disasters, Kautilya lists the features and remedies that would mitigate the issues. Interestingly, the measures that Kautilya advocates for are both practical and spiritual in nature. For example, during a famine, the king ought to first distribute the stockpile of foodstuffs and seeds in return for labor for irrigation projects and work on infrastructure. By bolstering the infrastructure—and hence, the productive capacity of the kingdom, the king can execute a long-term solution at the

same time as the distribution of food (the short-term solution). In tandem with this practical solution, Kautilya states that “those proficient in magical practices and thaumaturgic ascetics should reside in his territory, being honored by the king as those who remedy adversities arising from fate” (4.3.44). The discussion of these magical practices is relatively sparse in the Arthaśāstra, which is by most measures a practical guide for the king. However, this section in particular discusses sacrifice, worship, and magic because it illustrates the King’s fear of disaster.

Recall the ways that the king can scale up his tax collection during times of emergency. Those examples include defrauding the subjects of the kingdom to replenish the treasury. These measures indicate an emphasis on strong central government, even if it comes at the economic cost of the people. Kautilya believes that the king is central to all foreign policy (diplomacy, war, etc.) and risks internal strife and instability to keep the monarch in power. Despite the Arthaśāstra’s endless mention of the welfare and happiness of the citizens, Kautilya is so fearful of disaster and adversity that he prescribes arguably unethical practices to maintain the governmental hierarchy and power dynamic at all costs. This phenomenon of unethical activity in the face of disaster is not unique to the Kautilyan king. According to Juliet Sorensen, a \$100 per capita in FEMA relief was correlated with a 102% increase in corruption in a US state (Sorensen par. 5). Similar to the situations outlined in Kautilya’s Arthaśāstra, a state of emergency causes fraudulent activity at the government level at the expense of taxpayers. Urgent demand leads to a lack of quality controls, says Sorensen, which causes millions of dollars to be lost. The Arthaśāstra directly *instructs* the king to commit fraud, but Kautilya believes that deliberately engaging in this kind of activity may help the king buy some more time more time.

We can also observe Kautilya's caution in the way he treats the storehouse and treasury. The storehouse, which holds produce from the royal lands, is managed by the Superintendent of the Storehouse. One of his most important obligation is to "keep in reserve one-half earmarked for inhabitants of the countryside during a time of adversity" (2.15.22). This clearly depicts an emphasis on risk management. The holding cost for a high quantity of perishable resources is likely very high. The storehouse is likely always replenishing the resources in the storehouse and disposing of that which has spoiled. The treasury also serves a similar purpose. Recall from Chapter 2 of this thesis that the treasurer manages stores of wealth that rest along the countryside (2.5.4). This wealth is to be used exclusively in "times of adversity," such as war, drought, or famine. Holding hard currency in these stores affords the king many options to help ensure his subjects' welfare even in the face of threats.

The treatment of important industries reflects this fear of disaster as well. While trade and imports are critical to the health of the economy, Kautilya would rather not place the control of key resources under the control of foreigners. The monopolies on forests and mining reflect this. Important industries are kept under close control of the king's administration so that prices cannot be changed based on the demand for the products. If the control of necessary resources were under the control of other people, the king's subjects could face severe financial harm in times of crisis.

CHAPTER 5: AREAS FOR FURTHER STUDY AND CONCLUSION

Areas for Further Study

Discussion of Legal System

There is a vast portion of the Arthaśāstra, but primarily Book 3 and 4, which discuss the legal landscape of Kautilyan society. Given the opportunity, I would research the various ways that the legal system interacts with the economic system. For example, one thing I could have implemented in this analysis is a discussion of labor and employment laws and how it affects the economy. While labor laws and norms are briefly mentioned throughout this thesis, a more in-depth analysis on Kautilya's views on labor would be interesting. He generally mandates fair, proportional wages and believes in employing disadvantaged populations as well. An examination of motivations and theory of Kautilya's labor policy likely illustrate more deviation from free market ideas in favor of strictly regulated employment laws. Of course, these are not claims I am ready to make yet but with the proper research I believe they can be made eventually.

Additionally, there are aspects of the economy that I have not deeply analyzed because I believed they had more to do with law than economy. Of course, these two subjects are deeply connected and there are some policies that deserve more analysis. For instance, inheritance laws all but prevent the oldest son from receiving all the land. Understanding the implications of such policies in terms of income inequality and land distribution would be very riveting. Other such topics include the use of communal law interpretation and enforcement in villages. Since the

administration has limited resources, Kautilya believes that neighbors in the same village can help solve disputes about property borders and other disagreements. I would like to learn more about the mechanics of these processes and better understand how these ideas fit into the big picture of the Arthaśāstra.

Integrating these Arguments with Political Realism

Further analysis of Kautilya as a realist would be interesting. There is already some literature about this, such as Roger Boesche's book, *The First Great Realist: Kautilya and his Arthashastra*. Boesche's book is important because it strongly argues for Kautilya's place amongst great realist thinkers. However, it uses an older translation, leading to some outdated claims based on lesser-informed translations. Additionally, his work came well before the new research regarding the dating and authorship by McClish and Olivelle, causing him to heavily rely on history of the Mauryan Dynasty to support his claims. He often draws upon the historical examples of Chandragupta and Ashoka to discuss the legitimacy (or lack thereof) of Kautilya's teaching. We now know that his claims, while they may hold some weight, need some amending.

I would like to add to this literature by comparing the policies of Kautilya to other realist thinkers, such as Thucydides, the famous Athenian historian. His account of the Melian dialogue forms the basis for modern classical realism. Along the same lines, contrasting Kautilya with Plato and Aristotle may reveal insights into how each thinker approached realism from the perspective of advice. Most of the current literature focuses on how Kautilya's work compares to Machiavelli's *The Prince* (a work on classical realism). These analyses are interesting because it compares the political theories of two thinkers who independently arrive at similar conclusions.

Discussing their similarities and differences offers great insight into how each thinker thinks about certain issues. However, research comparing Kautilya to other political thinkers is severely lacking. I believe that comparing Kautilya to other realist thinkers--both structural and classical--would result in very fascinating insight.

How Economic Policy Affects Social Classes in the Kautilyan Society

There is also immense academic research on social norms in ancient South Asia such as the caste system. Texts that focus on topics such as the caste system are generally written from a Brahmanical standpoint. Kautilya takes a different approach to the division of social classes because of his emphasis on state primacy. From a cursory review, he seems to prioritize the power of the king more than religion and the traditional division of social classes. This seems to make sense because the text is written with the king as the intended audience. Hence, I would like to examine whether the economic policies outlined in this paper affect the social stratification of the Kautilyan society, and explain how certain official policy actions either reinforced or deviated from the standard construction of the social ladder.

Conclusion

In this thesis, I hope to have described the king's economic policies, goals, and corresponding motivations. To briefly recap, I first described the government's regulatory actions, such as standardized accounting, taxation, trade regulation, and fining. Then, I outlined the various ways that the government directly participates in the economy through infrastructure, agriculture, and monopolies. In these two sections, I offer a primary analysis on why Kautilya prescribes certain economic actions. To provide a deeper analysis on the state's underlying

motivations, I explained the concept of realism and power insecurity and tied it to the various actions taken by the king. Some of the key motivations driving the king's actions include a desire for growth, the desire for the happiness of the citizens, the suspicion of all agents, and a grave fear of disaster.

References

- Albi, Emilio, and Jorge Martinez-Vazquez. "The Elgar Guide to Tax Systems." *The Elgar Guide to Tax Systems*, Edward Elgar, 2011, pp. 37–38.
- Armstrong, Elia. *Integrity, Transparency and Accountability in Public Administration: Recent Trends, Regional and International Developments and Emerging Issues*. United Nations, 2005.
- Azhar, B. A., and Sharouh M. Sharif. "The Effects of Tax Holiday on Investment Decisions: An Empirical Analysis." *The Pakistan Development Review*, vol. 23, no. 4, 1974, pp. 409–32.
- Boesche, Roger. *The First Great Political Realist: Kautilya and His Arthashastra*. Lexington Books, 2002.
- Chandrasekaran, Pravin, 2006. "Kautilya: Politics, Ethics And Statecraft," MPRA Paper 9962, University Library of Munich, Germany.
- Christiano, Lawrence, et al. "When Is the Government Spending Multiplier Large?" *Journal of Political Economy*, vol. 119, no. 1, Feb. 2011, doi:10.3386/w15394.
- Darling, Malcolm L., and Edward Maclagan. *The Punjab Peasant in Prosperity and Debt*. Oxford University Press, 1947.
- Daunton, Martin J. *Progress and Poverty*. Oxford University Press, 1995.
- "ECONOMY | Definition in the Cambridge English Dictionary." *ECONOMY | Definition in the Cambridge English Dictionary*, dictionary.cambridge.org/us/dictionary/english/economy.

- Gray, Stuart. "Reexamining Kautilya and Machiavelli: Flexibility and the Problem of Legitimacy in Brahmanical and Secular Realism." *Political Theory*, vol. 42, no. 6, 2013, pp. 635–657, doi:10.1177/0090591713505094.
- Herzog, Lisa. "Markets." *Stanford Encyclopedia of Philosophy*, Stanford University, 8 Sept. 2017.
- Hughes, J. Donald. "Deforestation, Erosion, and Forest Management in Ancient Greece and Rome." *Journal of Forest History*, vol. 26, no. 2, 1 Apr. 1982, pp. 60–75., doi:10.2307/4004530.
- Jha, Krishna Nand., and Lalit Kumar Jha. *Chanakya, the Pioneer Economist: His Contribution to Economic Management in Ancient India*. APH Pub., 1997.
- Kokemuller, Neil. "Why It Is Mandatory for Companies to Abide by GAAP?" *Small Business - Chron.com*, Chron.com, 26 Oct. 2016, smallbusiness.chron.com/mandatory-companies-abide-gaap-73552.html.
- Korab-Karpowicz, W. Julian. "Political Realism in International Relations." *Stanford Encyclopedia of Philosophy*, Stanford University, 24 May 2017, .
- Marchetti, Cesar. "Infrastructures for Movement." *Technological Forecasting and Social Change*, vol. 32, 1987, pp. 373–93.
- Mearsheimer, John. *Kissing Cousins: Nationalism and Realism*. 2011, *Kissing Cousins: Nationalism and Realism*.
- Mearsheimer, John J. "Structural Realism." *International Relations Theories: Discipline and Diversity*, by Timothy Dunne et al., Oxford University Press, 2016, pp. 71–88.

McClish, Mark, and Patrick Olivelle. *The Arthaśāstra: Selections from the Classic Indian Work on Statecraft*. Hackett Publishing, 2012.

Murthy, Vijaya, and Jim Rooney. "The Role of Management Accounting in Ancient India: Evidence from the Arthaśāstra." *Journal of Business Ethics*, vol. 152, no. 2, 2016, pp. 323–341., doi:10.1007/s10551-016-3271-y.

Nossov, Konstantin. *War Elephants*. Osprey, 2008, *Google Books*, books.google.com

Olivelle, Patrick. *King, Governance, and Law in Ancient India: Kautilya's Arthaśāstra*. Oxford University Press, 2013.

Rahman, Monsurur, et al. *Commercial Practices In The Ancient Indian Peninsula : Glimpses From Kautilya ' s*. Vol. 13, no. 3, 2014, pp. 653–59.

Rangarajan, L. N. *The Arthashastra*. Penguin Books India, 1992.

"Salt Is Essential to Life." *Exploring Our Fluid Earth*, University of Hawaii, manoa.hawaii.edu/exploringourfluidearth/chemical/chemistry-and-seawater/salty-sea/weird-science-salt-essential-life.

Sorensen, Juliet. "Why Are Natural Disasters Breeding Grounds For Corruption?" *Why Are Natural Disasters Breeding Grounds For Corruption?*, Northwestern University, 3 Mar. 2014.

Souva, Mark. "Foreign Policy Determinants: Comparing Realist and Domestic-Political Models of Foreign Policy." *Conflict Management and Peace Science*, vol. 22, no. 2, 2005, pp. 149–163., doi:10.1080/07388940590948574.

Strauss-Walsh, Stephen. "Political Realism - Definition & Development." *International Politics*, vol. 45, Jan. 2008, pp. 19–39.

Vollrath, Dietrich, and Lennart Erickson. "Land Distribution and Financial System Development." *IMF Working Papers*, vol. 07, no. 83, Apr. 2007, p. 1., doi:10.5089/9781451866476.001.

Waldauer, Charles, et al. "Kautilya's Arthashastra: A Neglected Precursor to Classical Economics." *UTC Indian Economic Review*, vol. 31, no. 1, 1996, pp. 101–08.

Wiese, Harald. "The Kauṭilyan Market Tax." *Journal of the American Oriental Society*, vol. 134, no. 4, 1 Oct. 2014, pp. 699–708.

Trautmann, Thomas R. *Arthashastra - the Science of Wealth*. Penguin Books India Pvt Ltd, 2016.

Biography

Sriharsha Kethireddipalli was born and raised in Houston, TX, and lived there until he enrolled at the University of Texas at Austin in 2015. At UT, he majored in the Business Honors Program, Finance, and Plan II Honors. He spent the summer of 2016 studying management in Buenos Aires, Argentina. In college, he was a member and officer of various business organizations, such as the Honors Business Association and University Management Business Research Association, and Texas Alternative Investments. In his free time, Sriharsha enjoys running, traveling with friends and family, and following the Houston Rockets. This summer, he will be moving back to Houston to start his full-time job at Credit Suisse as an Oil and Gas Investment Banking Analyst.